LNG Unlimited

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Engie CEO signs major LNG deal with France's container giant

CMA CGM, led by Lebanon-born Jacques Saadé in fuel accord

Our Europe Editor

Engie CEO Isabelle Kocher puts pen to paper in Marseille

French energy company Engie has signed an accord to promote liquefied natural gas as a marine fuel with France's largest shipping group CMA CGM, operator of a fleet of more than 400 container vessels.

CMA CGM, led by Lebanon-born Chief Executive Jacques Saadé, is the third-largest container shipping company in the world.

Glory days

The Marseille-based group combines Compagnie Maritime d'Affretement (CMA) and Compagnie Generale Maritime (CGM), which at one time carried passengers on Transatlantic liners such as the "Normandy" and the "'France".

The LNG fuel memorandum of understanding was signed in Marseille by Farid Salem, Executive Officer of the CMA CGM Group, and Isabelle Kocher, Chief Executive of Engie.

The agreement will focus on a joint CMA CGM-Engie technical and economic study on LNG as a fuel for tomorrow's container shipping market.

Actions include setting up a study to develop engineering specifications for a bunkering vessel fully adapted to re-fuel LNG-powered container ships.

"We are most pleased with this cooperation with CMA CGM, which is a leader of maritime transport at the international level," said Engie CEO Kocher.

"For Engie, natural gas is a key element in the energy transition. The Group is actively engaged in the development of the diverse uses of retail LNG.

"Ultimately, LNG as marine fuel could lead to a massive reduction in pollutant emissions," she added.

According to CMA CGM Group's Salem LNG has all the environmental and propulsion advantages.

"It is undoubtedly the fuel of the future of the shipping industry that will progressively substitute heavy fuel oil over the next few decades.

"CMA CGM wishes to be a pioneer in this area and with the agreement with Engie this allows the company to move one step closer," Salem said.

Engie has a large portfolio of LNG interests in the production and import markets to sustain the long-term supply of fuel to customers.

The French utility and energy company has already initiated a partnership with Mitsubishi Corp. and NYK Line of Japan for LNG marine fuel development projects.

Part of that agreement was the ordering of the first purpose-built LNG bunkering vessel to be delivered in early 2017 to operate out of the Belgian LNG import terminal at Zeebrugge.

"This agreement rounds out the research program undertaken since 2011 by CMA CGM to design ever more environment-friendly large capacity container ships," the statement added.

In that regard, CMA CGM participates in two programmes.

Dual-fuel

"The first is about the development of a 'dual-fuel' large capacity container ship whose propulsion system offers to choose between using liquefied natural gas or fuel oil only," it said.

Launched in 2011 by CMA CGM, through its subsidiary CMA Ships, in partnership with the Korean shipbuilder Daewoo Shipbuilding and Marine Engineering, the design of this vessel was approved by French classification society Bureau Veritas.

The second project aims at designing a vessel propelled without fuel using a combined gas and steam turbine system to power this ultra-large container ship. ■

UNLIMITED AGENDA

Woodside posts improving LNG profits as Wheatstone project nears its completion

Our Asia-Pacific editor

Woodside Petroleum, the operator of the North West Shelf and Pluto liquefaction plants in Western Australia, reported improving results for LNG income as the Wheatstone project it is developing with Chevron Corp. moved closer to start-up with storage tank commissioning.

"Wheatstone LNG storage tank one is ready for cooldown and all Train 2 modules are on-site," said Woodside about the onshore venture located near Onslow, in the Pilbara region of Western Australia.

Mid-2017

"The Wheatstone project operator is expecting first LNG from Train 1 in mid-2017 with first LNG from Train 2 expected six to eight months later," Woodside stated, suggesting a train 2 start-up pushed out to 2018.

Wheatstone, which will have an initial capacity of 8.9 million tonnes per annum, was originally expected to come on stream at the end of 2016 or the start of 2017.

Woodside-operated Pluto liquefaction plant is located 190km northwest of the NWS export facility at Karratha

The Chevron-operated development comprises the Wheatstone, Iago, Julimar and Brunello gas fields, an offshore platform, a pipeline to shore and the onshore plant.

As regards its latest earnings, third-quarter income from Woodside's one-sixth of North West Shelf plant at Karratha, Western Australia, was almost 12 percent lower at US$203.8 million compared with the US$230.5M posted in the year-ago quarter. Woodside's LNG income from the nearby Pluto LNG plant it operates was little changed from the 2015 quarter at US$428.8M, but higher than the $449 posted in the second quarter.

The operator said Pluto's performance saw production at the highest achieved on a quarterly basis at 5.1 MTPA from the single Train.

"Production was higher due to high reliability and capacity during the cooler winter months," it said.

The company's third-quarter LNG performance was far more solid compared with the second quarter of 2016 when NWS LNG sales, for example, amounted to US$152.8M because of shutdowns.

Commenting on the NWS plant performance, Woodside said: "Production was higher primarily due to recommencement of full production following the major turnaround in the previous quarter, system enhancements made during the turnaround and higher reliability.

"The annualised loadable LNG production rate was 19.0 million tonnes per annum (100 percent of project)," Woodside added.

Woodside Chief Executive Peter Coleman described the company's performance as "exceptional" during the last three months.

"We set a number of production records this quarter driven by excellent LNG capacity and reliability, which contributed to a 20 percent quarter-on-quarter revenue increase," Coleman said.

Origin Energy CEO says LNG spending was worth risk and warns on climate-change policy direction

One of Australia's most respected energy company chief executives, Grant King of Australia Pacific LNG joint venture partner Origin Energy, said the project in the state of Queensland probably over-stretched the company's resources, though was now performing better than expected.

King was speaking at Origin's annual shareholder meeting at the Four Seasons Hotel in Sydney before handing over to the new CEO Frank Calabria.

The outgoing CEO also spoke on how Australia must adopt a responsible climate-change policy that was reliable and affordable and did not leave communities without energy or power.

"We may reflect that our investment in APLNG overly stretched the resources of Origin," said King.

"But the project is now complete, performing well ahead of expectations, and supported by a dedicated team of people in both operators who have done an outstanding job in delivering one of the largest resource projects ever undertaken in Australia," added King in reference to partners ConocoPhillips and China's Sinopec.

"They are committed to the continued improvement of the performance of the project. We are confident that our investment in APLNG will be a valuable investment for our shareholders over the longer term," the CEO said.

"APLNG has completed the development of its two-Train LNG project in Queensland and our funding of our share of this project is nearly complete.

"APLNG's extensive gas resources, previously wholly owned by Origin, together with other gas resources owned by Origin, can now be connected to the growing markets for gas in the nations of the Asian region as these nations also seek to improve the reliability, affordability and sustainability of their energy supply," King added.

Origin shareholders should be mindful of the fact that the company provides energy to more than 4 million homes and businesses in Australia and through the export of LNG power millions of homes in Asia as well.

The retiring CEO also admitted that the lower oil prices had required action to ensure the economic sustainability of Origin and the company faced another challenge in taking part in the transition to climate-change policies.

King warned against adopting climate-change policies in Australia that were irresponsible.

"This year, we have also seen on several occasions the highly disruptive effects that a lack of reliability in the delivery of energy can have on our communities, if we get this transition wrong.

"We are so used to enjoying a highly reliable supply of energy in Australia that debate on energy policy has focused more on affordability and environmental sustainability at the expense of reliability and economic sustainability.

Nakilat plans to take back LNG carriers from Shell

Nakilat Shipping Qatar Ltd, a wholly owned subsidiary of Qatar Gas Transport Co., has signed an agreement with Shell International Trading and Shipping to return management of Nakilat's LNG fleet to Qatari hands.

This will be the world's largest transition of LNG fleet operations. It involves 25 vessels which have so far delivered more than 320 million cubic metres of Qatar's LNG to over 20 countries.

Shell has provided a range of shipping services to Nakilat's LNG fleet since it was established in 2006.

"These included the ship management of 14 Q-Max and 11 Q-Flex LNG carriers and the sharing of Shell's Shipping & Maritime expertise," the companies said in announcing the change.

The vessels will be transitioned in three phases starting this year and shall be managed by Nakilat's in-house ship management arm, NSQL, which currently manages four large liquefied petroleum gas carriers and four Q-Flex LNG carriers.

Nakilat has carried out extensive studies and comprehensive preparations and planning to ensure the successful management of these essential assets to Qatar's gas supply chain from Qatar to the world, which plays a major role in the national vision for economic growth.

"Today marks a milestone in Nakilat's history as we embark on consolidating a fully-fledged shipping operation for our wholly-owned vessels," said Nakilat Managing Director Abdullah Fadhalah Al Sulaiti. "It is a pivotal stage in Nakilat's ambition of establishing an integrated maritime industry in Qatar.

Indian LNG imports surge with more shipments from Australia and US

Our Asia editor

Imports of LNG by India surged 32.5 percent last month compared to the same month a year ago as additional shipments arrived from the US and Australia.

India's import terminals received 2.37 million cubic metres of natural gas, the equivalent of 1.75 million tonnes of LNG, in September compared with 1.79 Bcm of natural gas, or 1.32MT of LNG, in the 2015 month, according to the Ministry of Petroleum and Natural Gas.

Fiscal total

The cumulative imports for the first-half of the fiscal year to the end of September amounted to 12.72 billion cubic metres, or 9.41MT of LNG, which was 26.9 percent higher than for the first half of fiscal 2015.

Most shipments currently come from Qatar but several cargoes were received during the month from Australia and the US as new projects ramp up.

If the current 2016 import levels are maintained India's terminals, all located on the West Coast, could bring in shipments of between 18MT and 19MT, given current infrastructure limitations in terms of the pipeline grid and geographical spread.

Deliveries to terminals near Mumbai to reach capacity limits

India's net annual LNG imports amounted to 14.6MT in the 2015 calendar year.

India's Minister of Petroleum and Natural Gas, Dharmendra Pradhan, said on October 13 that the country planned to increase its LNG capacity to 50 million tonnes per annum from the current 21 MTPA as new infrastructure comes on line on the East Coast and LNG fuel is marketed for transport.

Once the country develops import capacity on the East Coast, where none currently exists, LNG shipments will be able to rise higher. The four West Coast terminals also have plans or potential to increase existing capacity.

Petronet LNG said recently work was mostly completed for expanding its Dahej terminal from 10 MTPA to 15 MTPA in terms of capacity.

Dahej, located north of Mumbai, is the most widely used terminal. The Shell-operated import terminal at Hazira, also on the West Coast near Mumbai, has 5 MTPA of capacity.

The Dabhol facility, south of Mumbai, still only has the capacity to handle 1.7 MTPA of cargoes because of a lack of breakwater infrastructure.

Indonesia plans European-style LNG hub with services like truck loading

US energy construction company KBR was awarded an engineering study contract for an LNG hub terminal in the Indonesian province of East Java similar to European terminals and offering additional services such as truck-loading.

The contract was awarded by a joint venture comprising PT Australasia LNG Indonesia and PT Petrogas Jatim Utama.

The venture has Australian, Indonesian and Malaysian shareholders and plans to provide mid-scale LNG infrastructure in the Asia-Pacific region under long-term contracts.

The President of Indonesian LNG Australasia is Setyaki Arya and he said the plans are for a floating storage and regasification facility with the construction of infrastructure such as mooring, a jetty and truck-loading bays for local distribution.

European terminals import LNG from around the world and in addition to providing natural gas for national pipeline networks they also now load trucks for retail and wholesale distribution.

The developers said the Indonesian terminal would be located at Probolinggo, a port on the north coast of East Java, and could potentially be expanded by adding more LNG regasification equipment and storage to meet future demands for the fuel in the region.

"Our feasibility study is expected to be completed this year so ground-breaking could be done by the end of 2017," Arya said.

Under the terms of the contract, Houston-based KBR will provide a pre-front-end engineering and design study for the LNG Hub.

Despite being an LNG exporter, Indonesia has decided to build up a regasification network around the country where pipeline delivery is not available in many places to meet rising domestic natural gas needs.

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NEWS NUDGES

Centrica LNG charter deal

UK energy and utility group Centrica said it agreed to charter a 180,000 cubic metres capacity LNG vessel from Monaco-based US-listed GasLog Ltd for a seven year period starting in late 2019 Jonathan Westby, Co-Managing Director of Energy Marketing and Trading at Centrica, said "I am delighted that we are able to conclude this long-term charter agreement with GasLog and we look forward to building a successful partnership with them as Centrica continues to develop its presence in the global LNG market." The delivery of the GasLog vessel is expected to coincide with first commercial delivery of the Centrica 20-year US supply contract with the Cheniere Energy Sabine Pass plant.

Skangas wins Statoil tender

Skangas, the Norwegian unit of Finnish natural gas company Gasum, has signed an agreement with Statoil of Norway for the delivery of LNG to fuel the oil company's small vessel fleet, including several platform supply vessels and tugs in Norwegian waters. The LNG will be delivered to Statoil from several bases along the Norwegian west coast and to tugs based at the port of Karsto. The agreement is valid from April 2017 until the end of 2020, with an option for an extension.

LNG producer Peru boosted

Peru, the only South American LNG exporter, said China National Petroleum Corp. had made discoveries of up to 4 trillion cubic feet of proven natural gas resources in an exploration block it operates in southern Peru. CNPC, the parent company of PetroChina, bought the rights to explore Block 58 in Peru's southern Amazon region from Brazilian state energy company Petrobras in 2014.

Oil Search sees Papua New Guinea way forward as bigger existing plant

Our Asia-Pacific editor

Oil Search, the Australia-listed company that lost a takeover battle for the Papua New Guinea LNG asset holder InterOil to ExxonMobil, has explained its preference for three new production Trains centred on the existing liquefaction plant near the capital Port Moresby.

Its explanation was contained in third-quarter earnings as it reported a 16 percent rise in revenues to US$309.5 from US$267.7M in the year-ago period.

PNG LNG plant has sufficient land for new Train build-outs

Stakes

Oil Search is a shareholder in the PNG LNG plant near Port Moresby, operated by ExxonMobil.

ExxonMobil's bidding move was in opposition to plans by French energy company Total in PNG to back the Oil Search offer for InterOil because of InterOil's control of the Elk-Antelope gas field that will underpin the Total-led Papua LNG project.

Oil Search in explaining the outcome of the takeover of PNG LNG and Papua LNG stakeholder InterOil by ExxonMobil also issued its own views on the way forward for LNG in the small Oceania state.

"Once ExxonMobil's entry into the PRL 15 joint venture (Papua LNG) has been confirmed, we anticipate that talks will commence with the operator, Total, about possible cooperation and integration of the next phase of LNG development," Oil Search explained.

"Oil Search believes that there is sufficient gas resource in the Elk-Antelope and P'nyang gas fields to underpin at least two PNG LNG-sized expansion Trains, and possibly three Trains if planned appraisal and exploration drilling is successful.

"Building these Trains on the PNG LNG plant site and sharing downstream facilities would result in considerable capital savings and would materially improve operating efficiencies, generating superior returns for Oil Search shareholders, as well as for other stakeholders, including the PNG Government and local landowners," Oil Search stated.

"Under all anticipated scenarios involving cooperation, two highly credentialed operators of LNG developments, ExxonMobil and Total, will be maintained in PNG for the next phase of development," it added.

On its own earnings, Oil Search said the average realised oil and condensate price of US$47.24 per barrel was slightly lower than in the second quarter, but the average realised LNG and gas price was 23 percent higher, at US$6.44 per MMBtu, due to the three-month lag between oil and LNG pricing.

Canada says 40-year LNG export permit should encourage Petronas-led project

The Canadian province of British Colombia said the Pacific Northwest LNG project led by Malaysia's Petronas should take a positive view from the decision of the National Energy Board of Canada to issue an extended 40-year export licence to the venture.

"British Columbia's aspiration to build a liquefied natural gas export industry is gaining momentum with Pacific NorthWest LNG's receiving an extended export licence," said BC Minister of Natural Gas Development Rich Coleman.

"The provincial government understands Pacific NorthWest LNG is currently reviewing every element of its facility before a major investment decision can be determined," said Coleman.

"We respect this process and await the result," he added.

The federal government imposed 190 environmental and planning conditions in granting a go-ahead for the venture on September 27. The conditions are likely to lead to much higher costs.

Petronas and its partners are currently conducting a total project review over the coming months before announcing the next steps for the joint venture aimed at building a liquefaction plant at Lelu Island, near the port of Prince Rupert.

The other partners in the all-Asian venture are India Oil Corp., Japan Petroleum Exploration Co., China's Sinopec and Petroleum Brunei.

The liquefaction plant would be primarily located on federal lands and waters administered by the Prince Rupert Port Authority, about 15 kilometres south of the BC port.

The Malaysian company and its partners in their initial plan expected to have plant throughput of around 3.2 billion standard cubic feet per day of natural gas and produce around 20 million tonnes per annum of LNG over a 30-year period.

Golar to provide LNG FSRU on 25-year charter for power project in Brazil's smallest state

Our Europe editor

Golar LNG will provide a Floating Storage and Regasification Unit on a 25-year charter to supply a gas-fired electricity plant as part of a project in Sergipe, Brazil's smallest state located in the northeast of the country on the Atlantic coast.

Golar said its newest business, called Golar Power, will charter the FSRU to a Brazilian joint venture company following the signing of a construction contract with General Electric of the US for a 1.5 gigawatts combined-cycle gas-fired power plant in the region.

Investment goes ahead for LNG FSRU-led Brazil project

Scope

Located near Aracaju, the state capital of Brazil's Sergipe state, the power station will be the largest thermal power plant in South America.

The Sergipe project will supplement hydropower during dry seasons and help to meet growing demand for electricity in the region.

"Capital expenditure for the power station and terminal including taxes and financing costs is estimated at around US$1.3 billion at current exchange rates," Golar said.

The gas-to-power project is scheduled to deliver power to 26 committed off-takers for 25 years from 2020 in accordance with previously executed contracts.

"In connection with the Sergipe project, Golar Power has entered into an agreement to charter the FSRU 'Golar Nanook' for 25 years," Golar explained.

"The annual earnings contribution for Golar Power from the FSRU charter is currently projected to be US$39M with upside potential for Golar Power from FSRU capacity not utilised by the Sergipe power plant," Golar said.

Golar Power added that it had also increased its ownership in the Sergipe project from 25 percent to 50 percent.

"The final price to be paid for the shares will depend on the performance of the project and the structure includes an option, which if exercised, limits the price to US$50M," it explained.

Golar LNG has a 50 percent ownership interest in Golar Power. The remaining 50 percent is held by US equity fund, Stonepeak Infrastructure Partners.

Golar Power will own 50 percent of the Sergipe project and 100 percent of the associated FSRU to be deployed in Brazil.

Spanish LNG terminal and network owner sees profits rise

Enagas, the Spanish liquefied natural gas terminal owner and gas network operator, said industrial demand extended its positive trend during the first nine months of 2016, rising by 2.2 percent as its own net profits increased.

Enagas, which operates 10,314 kilometres of natural gas pipelines, posted a 1.5 percent rise in net profits for the nine months through September of 317.4 million euros ($349M) compared with 312.7M euros in the same nine months of 2015.

Total revenues fell 2.3 percent to 899.7M euros from 920.7M in the same nine-month period a year ago.

The company noted that in July 2016 it purchased a majority stake in the Sagunto LNG import terminal in eastern Spain, giving it control of six regasification facilities.

Through its subsidiary Enagas Transporte it agreed to buy an additional 42.5 percent of the Sagunto terminal from the holding company, Union Fenosa Gas Plant Sagunto Regasification (Saggas), for 106M euros.

Enagas is already a stakeholder or has operatorship in the import and regasification facilities at Barcelona, Cartagena, Huelva, Bilbao and El Musel.

The Enagas LNG terminals have a total of 16 storage tanks around the country with capacity for 1.95 million cubic metres.

Enagas said that while domestic natural gas demand totalled 226.5 terawatt hours, down 1.7 percent compared with the same period last year as hydroelectric generation took market share, industrial natural gas demand extended its rise by more than 2 percent. ■

Canadian economic policy body says LNG projects would be boost to nation

Our North America editor

Kitimat in BC is a favoured location for LNG developers

The Conference Board of Canada, an independent economic policy think-tank, said that Canadians would benefit from liquefied natural gas export projects and the nation could create an industry with good prospects of long-term expansion.

With liquefaction plant investment slowing down and numerous Canadian LNG export ventures postponed or cancelled, new projects would still be needed in the coming years to meet future demand.

Challenge

"While low prices will challenge the economics of new Canadian LNG projects, the news is not all bad for Canada's gas extraction industry," said Carlos A. Murillo, an economist at the Board.

"New investment will still be needed to meet the world's long-term demand for natural gas," added Murillo.

"However, this opportunity cannot be taken for granted. Cost competitiveness and time of entry must be kept at the top of the mind in order for Canada to succeed in the growing global LNG market.

"Given the current speed of project approval and development, that is not a concern to be taken lightly," stated Murillo.

"Conditional approval of the Pacific Northwest LNG project by the Government of Canada is a positive development for the industry.

"But, any significant anticipated surge in industry output stemming from this decision is still years away," the Board said in an LNG report.

The board noted that low commodity prices would challenge the economics of new LNG projects, including those proposed in Canada.

"Following pre-tax losses exceeding $1.7 billion in 2015, Canada's gas extraction industry will be in the red again this year, with a loss of a similar magnitude, primarily the result of persistently low natural gas prices in North America," the report noted.

"After growing at a pace of 11 per cent per year over the last decade and reaching a cumulative US$200 billion (in 2015 terms), global investment in LNG liquefaction is expected to decrease," it added. ■

Japan to upgrade state firm Jogmec for takeovers of overseas companies

The Japanese government approved a bill to overhaul Japan Oil, Gas and Metals National Corp. (Jogmec) to enhance the functions of the state-owned body to support Japanese upstream developers in acquiring overseas resource companies for LNG projects and other ventures.

"Recent low oil prices have been shrinking the global investment scale in resource development for two consecutive years, and this trend uncovers the potential risk of a sharp rise in oil prices," said a statement from the Ministry of the Economy Trade and Industry.

An example of Jogmec's current activities can be seen in Canada, where the state-backed Japanese company is investing in four LNG and natural gas projects under development in the province of British Columbia, Pacific NorthWest LNG, Aurora LNG, the Cordova Embayment and the Cutbank Ridge Partnership.

Jogmec has also helped overseas energy operator Inpex Corp with its LNG and natural gas activities in Indonesia and Australia with government-backed funding.

However, the new plans would give the investment body a more active role in supporting Japanese energy company takeovers overseas.

"A decrease in the asset value of oil interest has apparently been driving overseas resource companies to sell related stocks and interest," the Ministry explained.

"This situation will be a good opportunity for Japan to fortify energy security through intensive investment in the area over the next five years or so.

"Looking at other countries, national oil companies in China and India, and Western oil majors, have been embarking on the acquisition of interest or companies, while Japanese upstream developers are left behind this trend due to their fragile financial foundations," the Ministry stated. ■

Nordic natural gas and LNG market gathers pace amid infrastructure and project plans

Our Europe editor

Finland's natural gas and LNG company Gasum posted 16 percent lower net sales amounting to 589 million euros ($648M) for the third quarter compared with 702M euros for the same three months of 2015.

Gasum is mainly involved in the LNG business through its ownership of the Norwegian company Skangas and while it saw natural gas and LNG sales fall its Finland-based biogas sales rose.

Newest European LNG terminal at Pori port in Finland

Leader

Subsidiary Skangas is a market leader in the Nordic region with LNG production plants in Risavika, Norway, and Porvoo, Finland, as well as LNG reception terminals in the Norwegian town of Ora, at Lysekil in Sweden and the newest at the port of Pori in Finland.

"The downward trend in natural gas volumes seen over the past few years has levelled off, and this year's natural gas consumption has been at the same level as last year," Gasum said in its earnings statement.

"During the period under review, Skangas accounted for 111M euros, or 19 percent of the Gasum Group's revenue compared with 159M euros in the 2015 quarter," Gasum added.

"Gasum has taken strategic steps forward as planned during the period under review," said Chief Executive Johanna Lamminen.

"Finland's first LNG terminal was opened in Pori and deliveries to customers began in September.

"The terminal enables LNG deliveries to industrial, maritime and heavy-duty road transport customers outside the gas pipeline network and diversifies the Finnish energy market," CEO Lamminen added.

Gasum stated that plans were also progressing on bringing on line another LNG import terminal in Finland.

"The Pori LNG terminal strengthens the position of Skangas as a major player in the Nordic countries.

"Progress in the construction of the Tornio Manga LNG joint project is also being made as planned and the terminal will be completed in Tornio in early 2018," Gasum said.

Gasum pointed out that during the third quarter it also entered into a partnership with Finnish marine propulsion equipment maker Wartsila.

"Our joint co-operation agreement aims to develop the utilization and distribution of natural energy gases in marine and onshore markets as well as to increase the availability of natural gas for marine use," it added.

In the biogas business, Gasum said it invested in doubling the capacity at its Oulu biogas plant.

The expansion project is part of the company's strategic objective to achieve growth in the renewable biogas market.

Gasum is the leading supplier of biogas in Finland whereby it processes waste and produces biogas in the process.

"Demand for biogas produced from waste is increasing in the Nordic market where policy-makers and long-term targets are in favour of the circular economy and biogas production," Gasum said.

The company has seven biogas plants located in the towns of Honkajoki, Huittinen, Kuopio, Oulu, Riihimaki, Turku and Vehmaa.

Gasum also injects biogas into the Finnish national gas network from Espoo, Kouvola, Lahti and Riihimaki. ■

Crowley LNG Alaska wins contract to supply fuel by truck for power plant near Fairbanks

Crowley LNG Alaska, a unit of the shipping company Crowley Maritime, was awarded a contract to supply the fuel to a small dual-fuel power plant that serves a remote community near Fairbanks in Alaska.

The LNG will be procured from the Point Mackenzie small-scale liquefaction facility and transported by road to the power plant in the town of Tok owned by the utility Alaska Power & Telephone Co. (AP&T), which provides services in 40 rural Alaskan communities.

Crowley said the contract includes both the LNG supply and technical services to enable the small electricity plant to use LNG as a supplement to diesel-based power generation.

Alaska's Point MacKenzie liquefaction facility, known as Titan LNG, was built in the 1990s to supply natural gas to parts of the Fairbanks area.

Two tanker trucks a day leave the Point MacKenzie facility to deliver the LNG.

Crowley said that once its LNG is trucked to the Tok power plant it will be regasified and piped to a dual-fuel kit supplied by a company called ECO Alternative Fuel Systems.

Crowley, through its Carib Energy group, also supplies LNG in containers through the Port of Jacksonville in Florida to customers in Puerto Rico and the Caribbean.

Crowley LNG Alaska was formed in 2015 to begin offering supply, transportation and distribution services to the Alaska market.

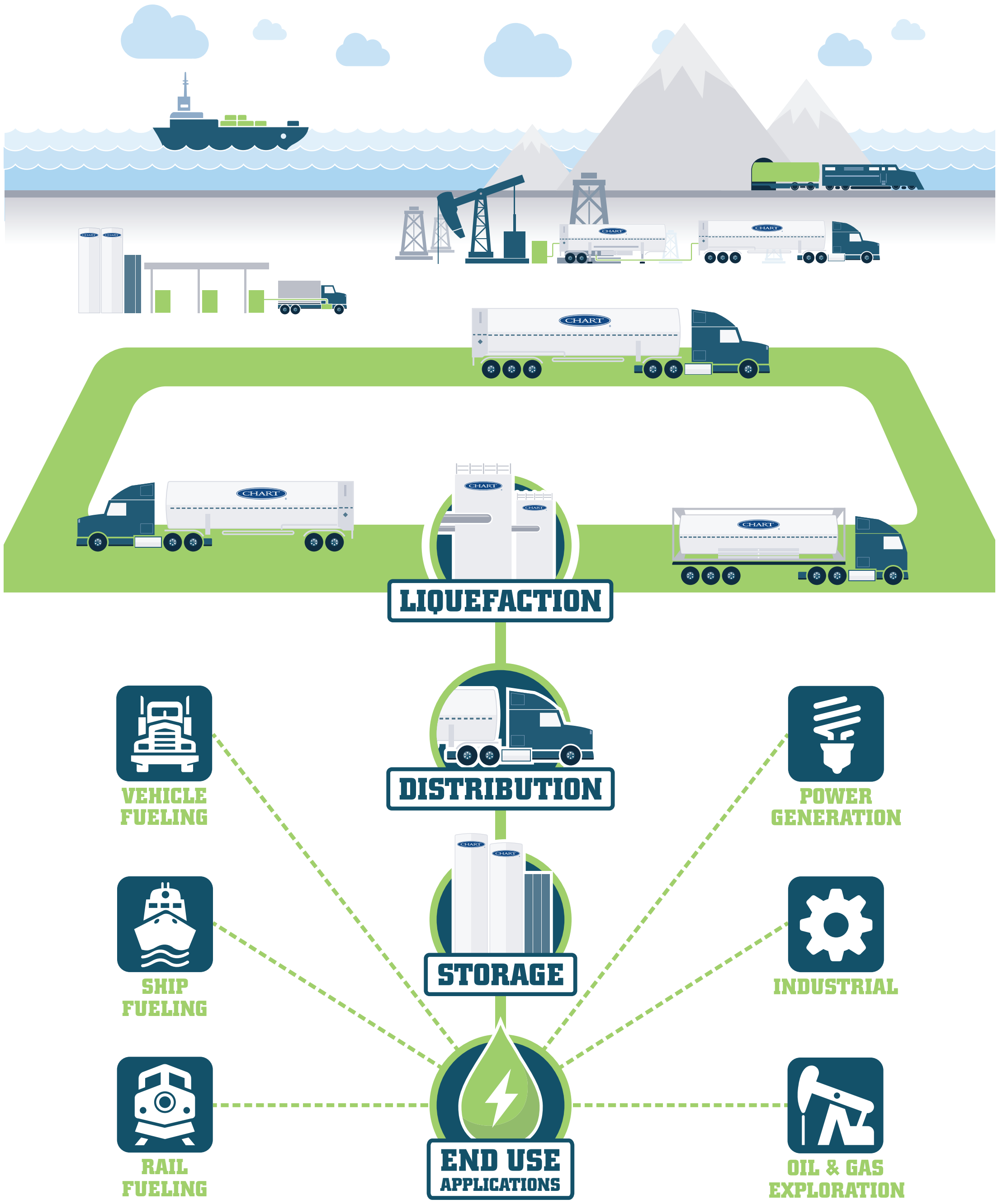
"Crowley is extremely pleased to be a vital fuel supplier to Alaska Power & Telephone," said Matthew Sievert, director of Crowley LNG business development.

"We have been working side by side with AP&T for over a year now, assisting with the engineering and design to utilize natural gas and to carry out the logistics necessary to accommodate LNG delivery to the Tok plant," Sievert added.

"We want to thank Bob Grimm, President of AP&T, and his staff for having confidence in our services as they develop an innovative fuels portfolio that includes LNG, a cost-effective, safe, reliable and environmentally friendly fuel," Sievert said.

AP&T's Grimm said he was proud to be able to offer customers in Alaska's Tok region access to LNG as a cleaner option to diesel-based generation. ■

LNG VALUE CHAIN SOLUTIONS



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